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United States Courts
Southern District of Texas
FILED

JAN 0 2 2003

Michael N. Milby, Clerk

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION

UNITED STATES OF AMERICA	§	
	§	
V.	§	CRIMINAL NO. H-99-455SS
	§	JUDGE LEE H. ROSENTHAL
JORGE LUIS GARZA, a.k.a. Guillermo	§	
Huertas-Sanchez a.k.a. Mono Renzo	§	

MOTION AND MEMORANDUM SEEKING TO EXCLUDE DEFENSE EXPERT WITNESS TESTIMONY; MEMORANDUM IN SUPPORT OF ADMISSIBILITY OF GOVERNMENT'S EXPERT WITNESS' TESTIMONY

UNITED STATES OF AMERICA, by and through Michael T. Shelby, United States Attorney for the Southern District of Texas, hereby moves this honorable Court, pursuant to Evidence Rule 702 and *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), to conduct a hearing outside of the presence of the jury and to thereafter exclude the testimony of Al Yonovitz, Ph.D., on behalf of defendant in the instant case upon the subject of aural-spectrographic analysis. In support of said motion, the Government offers the following law and argument.

I.

Federal Rule of Evidence 702 states that a witness qualified as an expert may offer an opinion based upon scientific and technical knowledge possessed by the witness if such testimony would assist the trier of fact and if,

> "(1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case."

Interpreting this rule, the Supreme Court of the United States has stated that, "The focus, of course, must be solely on the principles and methodology, not on the conclusions that they generate." *Daubert,* supra at 595. While Federal Rule of Evidence 104 places upon the court the obligation of determining the admissibility of evidence, the proponent of the evidence sought to be admitted must establish admissibility by a preponderance of evidence. *Bourjily v. United States,* 483 U.S. 171 (1987).

II.

In the instant case, both the Government and the Defendant intend to offer the trier of fact expert testimony on the subject of aural-spectrographic analysis. Pursuant to the above authorities, the testimony of Defendant's expert must necessarily be excluded due to a failure to conduct his examination in accordance with current scientific standards which control aural-spectrographic analysis of auditory evidence. *United States v. Williams,* 583 F.2d 1194, 1198 (CA2 1978), as cited in *Daubert,* at p. 594.

As can be seen in the report of Government's expert witness Special Agent Ryan O. Johnson, a copy of which is attached hereto as "Exhibit A", in his aural and spectrographic analysis of the recorded evidence herein, Special Agent Johnson followed the guidelines established and maintained by the American College of Forensic Examiners (ACFE), the American Board of Recorded Evidence (ABRE), and the Audio Engineering Society (AES). Special Agent Johnson's methodology is meticulously cataloged in paragraphs one (1) through ten (10) of the Details section of his report.

In contrast, from the report of Defendant's proffered expert Yonovitz, a copy of which is attached hereto as "Exhibit B", Yonovitz purports to have utilized the guidelines established by the International Association of Identification (IAI), in his aural and spectrographic analysis of the recorded evidence collected in this case. However, upon examination of Yonovitz, the Court will learn that the IAI does not currently maintain any standards controlling the operation of aural and spectrographic analysis of evidence, and has not done so for years. As stated by the Court in *Daubert,*

> "Widespread acceptance can be an important factor in ruling particular evidence admissible, and "a known technique which has been able to attract only minimal support within the community," *United States v. Downing,* 753 F.2d 1224, at 1238, may properly be viewed with skepticism. The inquiry envisioned by Rule 702 is, we emphasize, a flexible one. Its overarching subject is the scientific validity and thus evidentiary relevance and reliability of the principles that underlie a proposed submission." *Daubert,* at pp. 594-595.

It is precisely Yonovitz' failure to operate in accordance with scientifically accepted standards of analysis which resulted in the exclusion of his testimony by the Honorable Judge Nancy F. Atlas in *United States v. Willie Early Jackson,* Case No. H-00-199, (2000). As stated by Judge Atlas in her ruling from the bench excluding Yonovitz' testimony,

> "[F]or this science to become accepted in the court of law, standards need to be met; and if you can't meet the standards, the discipline teaches you you do not give an opinion for the purpose of testimony. Testimony like Dr. Joe – or Mr. Joe or Dr. Yonovitz want to give here will ruin, ruin the science and the movement that I think he believes in and that frankly I think has some merit in proper settings." *Jackson,* supra at partial transcript p. 138, a copy of which is attached hereto as "Exhibit C".

III.

WHEREFORE, the United States respectfully requests that this Honorable Court conduct a hearing outside the presence of the jury requiring Defendant to prove the reliability of the standards followed by Dr. Yonovitz in conducting the examination of the evidence herein, and thereafter, the Court exclude defendant's expert testimony on the subject of aural-spectrographic analysis.

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing was sent to counsel for Defendant, J.A. Salinas, III, Attorney at Law, 12 Greenway Plaza, Suite 1100, Houston, Texas (77046), by fax to (713)227-4510 on January 2, 2003, and by regular U.S. mail, postage prepaid, on or before the date of filing.

/FOR
BERTRAM A. ISSACS

U.S. Department of Justice
Drug Enforcement Administration

REPORT OF INVESTIGATION

1. Program Code	2. Cross File / Related Files	3. File No. M3-97-0178	4. G-DEP Identifier XNC1I
5. By: S/A Ryan Johnson At: Houston F.D.		6. File Title VALLEJO, Javier	
7. ☐ Closed ☐ Requested Action Completed ☐ Action Requested By:		8. Date Prepared 12/11/01	
9. Other Officers:			
10. Report Re: Voice Identification Report			

GOVERNMENT EXHIBIT
A

SYNOPSIS

This report entails the results of a voice identification analysis, conducted by Special Agent (S/A) Ryan Johnson. The purpose of the analysis is to determine whether or not the voice on government audio exhibit N-14 is similar or different to the voice of Jose Luis GARZA. S/A Johnson has been trained extensively in forensic audio/video, which includes voice identification. The voice identification method involves aural and spectrographic analysis. S/A Johnson followed guidelines established by American College of Forensic Examiners (ACFE), the American Board of Recorded Evidence (ABRE) and the Audio Engineering Society (AES) regarding voice identification analysis. These standards are recognized in federal and state courts throughout the United States.

DETAILS

1. Voice Identification Experts are required to work within the perimeters established by the ACFE. After an analysis is completed, an expert can make one of seven decisions, which are identification, probable identification, possible identification, inconclusive, possible elimination, probable elimination, or elimination. The aforementioned decisions are made after the aural and spectrographic analysis is completed. An aural comparison involves critical listening by the examiner, which determines whether the voice on the known and the unknown audio are similar or different. Characteristics such as pitch, pronunciation, accent, rate of speech, breathing patterns and speech impediments are apart of the critical listening process. Spectrographic analysis involves the visual comparison of the patterns produced by the

11. Distribution: Division / District / Other ST	12. Signature (Agent) Ryan Johnson	13. Date 12/11/01
	14. Approved (Name and Title) Jeffrey Grabowski Group Supervisor	15. Date 12/21/01

DEA Form -6
(Jul. 1996)

DEA SENSITIVE
Drug Enforcement Administration

1 - Prosecutor

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speech sounds from the known and unknown audio. It is an exercise in pattern matching. The following statements explain how a decision is arrived at:

Identification-At least 90% of all the comparable words must be very similar aurally and spectrally, producing not less than twenty (20) words. Each word must have three (3) or more useable formants.

Probable Identification-At least 80% of the comparable words must be very similar aurally and spectrally, producing not less than fifteen (15) matching words. Each word must have two (2) or more formants.

Possible Identification-At least 80% of the comparable words must be very similar aurally and spectrally, producing not less than ten (10) matching words. Each word must have two (2) or more formants.

Inconclusive-Falls below either the Possible Identification confidence levels and/or the examiner does not believe a meaningful decision is obtainable due to various limiting factors. Comparisons that reveal aural similarities and spectral differences, or vice versa, must produce an inconclusive decision.

Possible Elimination-At least 80% of the comparable words must be very dissimilar aurally and spectrally, producing not less than ten (10) words that do not match. Each word must have two (2) or more useable formants.

Probable Elimination-At least 80% of the comparable words must be very dissimilar aurally and spectrally, producing not less than fifteen (15) words that do not match. Each word must have two (2) or more useable formants.

Elimination-At least 90% of the comparable words must be very dissimilar aurally and spectrally, producing not less than twenty (20) words that do not match. Each word must have three (3) or more useable formants.

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2. On October 25, 2001, Task Force Officer (TFO) Genni Ruzzi provided S/A Johnson with audio exhibit N-14, and a transcript of the conversation in question. Exhibit N-14 is a standard DEA U.S. Government tape that contains conversations from a Title III wiretap. Since S/A Johnson did not personally record the tape, it will be referred to as the "Unknown."

3. S/A Johnson visibly examined the condition of the unknown tape and determined that it was in good condition. S/A Johnson initialed and scanned the face of tape into the computer and made color prints. S/A Johnson determined the proper speed of the tape, aligned the azimuth, and downloaded the audio into the computer. The downloading process is referred to as analog to digital conversion. After listening to the unknown audio for numerous hours, S/A Johnson chose the words and or phrases that could be used to develop spectrograms and take a voice exemplar. Spectrograms are also referred to as voiceprints. The spectrograms taken from N-14 are referred to as the "unknown spectrograms." The following words and or phrases from exhibit N-14 were selected to make spectrograms:

Unknown Statement #1 occurs approximately 58 seconds into the conversation
Spanish-Claro, hermano. Eso es de…Hermano, son tres dos cientos exacto,
English-Right, man. That's…Man, it's exactly three two hundred, man.

Unknown Statement #2 occurs approximately 5:22 into the conversation
Spanish-OK, esta'a nombre de Mauricio Gutierrez.
English-OK, it's in the name of Mauricio Gutierrez

Unknown Statement #3 occurs approximately 6:05 into the conversation
Spanish-Diez quince cero cero veintiocho treinta y cuatro seis sesenta
English-Ten fifteen zero zero twenty eight thirty four sixty six

4. On November 15, 2001, S/A Johnson received a fax copy of the court order from Assistant United States Attorney (AUSA) Bert Isaac's, that ordered Jose Luis GARZA to give the government a voice exemplar. S/A

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Johnson then contacted Mr. GARZA's attorney to schedule a time and location to take the exemplar. Mr. GARZA's attorney is Joe Salinas.

5. S/A Johnson conducted the exemplar on November 19, 2001, at the Federal Building, 515 Rusk, Houston, Texas. Joe Salinas was with Mr. GARZA during the exemplar. Present with S/A Johnson was Mr. Martin Valencia, who is the Program Manager for the Translation Company that is currently contracted by DEA. Mr. Valencia assisted S/A Johnson with the exemplar because of his proficiency with the Spanish language. Mr. Valencia is particularly familier with the procunciation of words, accents, and colloquialisms that are unique to native Colombians. The exemplar was taken over the telephone, because exhibit N-14 is a recorded telephone conversation.

6. The exemplar was recorded on a standard DEA U.S. Government tape. This tape is referred to as the "Known." The known tape consist of the entire exemplar recorded by S/A Johnson. After the exemplar, S/A Johnson took the known tape back to the laboratory, processed it according to DEA standards, and downloaded the audio into the computer. After the downloading process was completed, S/A Johnson developed the "known spectrograms."

7. The unknown spectrograms had a considerable amount of noise, but not enough to camouflage the speech patterns. S/A Johnson removed some of the noise by using filtering techniques. The known spectrograms had a hum that was produced by the telephone line at the Federal Building, but the hum did not interfere with the speech patterns.

8. S/A Johnson's aural analysis revealed that the voice on the known audio exhibit sounds very similar to the voice on the unknown audio exhibit. Mr. GARZA's pitch, pronunciation, accent, colloquialism, and rate of speech are very similar to that of the unknown audio exhibit. S/A Johnson also conferred with Mr. Valencia regarding the pronunciation of words, accents, and colloquialisms that are unique to Colombian speakers. Mr. Valencia listened to the unknown and known audio exhibit and determined that the voice in the unknown and the known exhibits sounds very similar as well.

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9. S/A Johnson's spectrographic analysis produced the following results: Out of the twenty (23) words that were spoken by Mr. GARZA during the exemplar, fifteen (15) of the words had two (2) or more matching formants in the unknown and known; four (4) of the words had one (1) matching formant in the unknown and known; four (4) of the words had no matching formants.

10. Based S/A Johnson's aural and spectrographic analysis, which are perscribed by the ACFE, it is highly probable that the voice on the unknown exhibit is the same as Mr. GARZA's voice.

INDEXING

GARZA, Jose Luis-Naddis #3944994

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GOVERNMENT EXHIBIT
B

YONOVITZ & JOE, L.L.P.
Forensic Tape Analysts
Experts and Consultants
P.O. Box 702287
Dallas, TX 75370

Al Yonovitz, Ph.D., CCC-A
Herbert Joe, M.A., J.D., B.C.F.E., D.A.B.F.E., D.A.B.L.E.E., F.A.C.F.E.

214/505-TAPE
405/943-TAPE

November 12, 2002

Mr. J.A. Salinas, III, Esq.
12 Greenway Plaza, Ste. 1100
Houston, Texas 77046

RE: *U.S. vs: Jorge Luis Garza*, Criminal No. H-99-455-S-02;
In The Southern District of Texas, Houston Division

TO WHOM IT MAY CONCERN:

I. INTRODUCTION.

Yonovitz & Joe, L.L.P. was retained by Mr. Joe A. Salinas, III, Esq. to perform voice/speaker identification or elimination via aural-spectrography analyses. Aural-spectrographic analyses were accomplished that compared the audio signals from the UNKNOWN exemplar with that of the KNOWN exemplar (both described below).

II. CONCLUSION.

Based partly on the guidelines promulgated by the International Association of Identification[1] (IAI), the current status of this topic within the scientific community, as well as aural analyses, there is a PROBABLE ELIMINATION of Mr. Jorge Luis Garza as the male speaker on the UNKNOWN exemplar. In other words, Mr. Jorge Luis Garza is not likely the male speaker from the particular ("unknown") recording analyzed. Such elimination is based on both spectrographic results and forensic aural/linguistic analyses.

III. TAPE AND CONTENT DESCRIPTION.

The UNKNOWN EXEMPLAR is labeled "UNKNOWN" on a CD-ROM labeled "M3-97-0178." This CD-ROM has been held out as a made by the government for Mr. Jorge Luis Garza's defense attorney. There are eight tracks on this CD-ROM, with track 1 being the "UNKNWON" exemplar. Track 2 is purportedly the "KNOWN" exemplar made by the government in the government's voice comparison. The KNOWN exemplar was made by Yonovitz & Joe, L.L.P. on October 15, 2002 at the U.S. Marshall's Office in the presence of Mr. Salinas and a representative of the U.S. Marshall's Office.

IV. METHOD AND ANALYSES.

Aural-Spectrographic. The aural-spectrographic method determined whether Mr. Jorge Luis Garza, based on the recording described above, is the same speaker as a particular speaker on the UNKNOWN recording. This method is based upon the general principles that

[1] The undersigned, a professor of the speech and hearing sciences, is a former member of the certification and standards committee of the IAI.

have been promulgated by the International Association of Identification (IAI). Essentially, this method permits a decision that is based along a continuum of Elimination and Identification. Probabilistic values are determined and stated in terms of positive elimination, probable elimination, probable identification, and positive identification. The examiner may also determine that the taped recordings are not of significant quality or quantity to offer a valid conclusion.

Spectrographic Analysis. Spectrograms were compared for several features, which may include fundamental frequency, steady state formant analysis, formant transition analysis and acoustic features common to each spectrogram. Spectrographic features may include speaking fundamental frequency (f0), perturbation analysis, formant position and bandwidth, and transitional duration.

Aural Analysis. The exemplars were compared via phonetic analysis. Also, other features, e.g., timing, linguistic and non-linguistic features, were compared. The fundamental frequency for the KNOWN voice was notably higher compared to the UNKNOWN. The resonant (overtone structure) quality was also remarkably different for the KNOWN and UNKNOWN exemplars. Dialectical patterns were also different.

Results. Both exemplars or recordings were of high enough intelligibility and quality to permit valid aural and spectrographic analyses. The signal-to-noise ratios (S/N) for the exemplars were also of sufficient levels to allow voice comparisons. The KNOWN exemplar of Mr. Jorge Luis Garza was *probably eliminated* when compared to the UNKNOWN exemplar. In other words, the speaker identified as Mr. Jorge Luis Garza is not likely the same as the speaker of the UNKNOWN exemplar.

Equipment Utilized. All recordings were recorded or played back on Nakamichi or Sony professional tape recorders. The spectrographic and pitch analyses were made with a Pentium IV-based computer. The audio signals were digitized at 44100 Hertz, 16-bit resolution. Appropriate anti-aliasing filters were utilized when needed. A software program (CSRE, AVAAZ systems) determines each spectrogram and pitch measures.

DEA S/A Ryan Johnson has proffered a report dated Dec. 11, 2001 in which he (along with Program Manager Martin Valencia) concludes a "highly probable" identification of his "KNOWN" exemplars with the above-described "UNKNOWN" exemplar. The undersigned reserves the right to supplement this report with a detailed explanation of how and why the Johnson-Valencia report is flawed procedurally and as to its results.

Sincerely,
YONOVITZ & JOE, L.L.P.
Forensic Tape Analysts, Experts and Consultants

a. Yonovitz

Al Yonovitz, Ph.D., CCC-A
Associate Prof., Speech and Hearing Sciences
Clinical Audiologist/Forensic Scientist

Excerpt from U.S. v Willie Earl Jackson #00-199

GOVERNMENT EXHIBIT C

THE COURT: Thank you. You may step down.

THE COURT: Okay. Any other witnesses, Mr. Taylor?

MR. TAYLOR: No, Your Honor.

THE COURT: Okay. Mr. Pechacek, you're done?

MR. PECHACEK: Yes, Your Honor.

THE COURT: Okay. We're going to take a little break and I'm going to come back and I'm going to come back in half an hour and I will issue a ruling. Thank you all.

I should say this: Does anybody want to make any argument on any of this, brief, for five minutes max? Do you want to? I failed to ask that.

MR. PECHACEK: Yes, Your Honor.

THE COURT: Okay.

MR. TAYLOR: We'll yield to the state, Judge.

THE COURT: You'll yield to the state?

MR. TAYLOR: Yes, ma'am.

THE COURT: Okay. You-all can be seated then. We'll have that.

MR. PECHACEK: It's very simple, Judge. They are attempting to put on an expert witness to testify concerning voice identification and they're putting on someone that is holding himself out as an expert in the field, yet he is not complying with the requirements of the field.

Further, the report that he issued, that's been issued by both of them is almost a fraud. It actually is a fraud taken in context of what examiners of this type require. So, in using a Daubert analysis, Your Honor, we look to reliability, No. 1, and then you look to relevance, No. 2.

And in this case, Judge, what you find is that significant extreme false statements have been made. The methodology that has been employed in this case by the expert witnesses hired by the defense do not come close to even -- it doesn't even come close to the methodology which is called for by the boards in this field, that is, voice identification.

Daubert requires that the information be reliable. The Fifth Circuit in its opinion, which I cite, Posada, specifically refers to polygraph or voice examination. And they say that you have to have some type of quantifiable objective method for determining a rate of error. That is something they give as a specific precise example. And, Judge, they haven't done that. They haven't. They haven't put forward anything.

Further, if you recall the testimony of Dr. Nakasone, he said the scientists in this field say you cannot come up with that. Judge, clearly under Daubert they haven't met the first prong. They haven't met reliability.

Further, Your Honor, with regard to relevance, applying the science to the facts of this case, in making their tape recording, they have not made it relevant because they haven't recorded it in the same way. They used a tape recorder, a microphone right up to his mouth when it was a Kell recorder that was a beeper on somebody's belt. And the fellow that we're saying said the words were in the car. They haven't even come close.

Further, it was transmitted over a telephone. And Dr. Nakasone has told you that telephone companies have some type of -- something that limits the ability to record the physical characteristics of the voice. He said that. I don't know what words he used. I can't remember that.

Judge, in applying what they have to the facts of this case, their evidence is not relevant either. But most importantly, Judge, the Fifth Circuit in Kumho Tire, which is the Supreme Court of the United States, in 1999, have recognized the gatekeeping function of the courts. And what they tell you is this: Somehow you have to look at what they're saying and you have to realize that expert witnesses going before a jury are going to be trusted and believed by a jury because they are holding themselves out as experts. They are giving objective scientific reasons for saying what they are saying. And a jury is going to listen to them, and they're going to believe them. They're going to think -- they're going to think these people are smarter than us, they know more about this than we do, and they're going to assign greater weight to what they say. And that's how it should be. But you have to have valid expert testimony before you can do that. And you don't have it here. I think that sums it up.

MR. TAYLOR: Judge, if it please the Court, we, of course, beg to differ with the state's position as to whether or not the person that the Court heard this morning is, in fact, an expert. The case as set forth indicates that a person who has information that is relevant may testify. A person who has a particular knowledge, a particular skill, a particular educational background is in a position to testify any time that information as disseminated will aid the trier of facts in making a conclusion.

It is our position that the witness that we set forth this morning has the education, has the experience, has the background, has the knowledge to form the opinion that he used. The question that I asked him earlier as relevant to the IAI has been all and end all as to what a person must use in making the conclusion that he did. He said in addition to this IAI, he has a trained ear, Judge. I think the degree that he has, the education that he has, the experience that he has allows him, in addition to using the machine, to form the conclusion that he did. I don't think anything is wrong with his conclusion, based on his knowledge and based on his expertise.

I think that it would be quite relevant to allow him to testify before the jury, because no doubt he is an expert. He has written extensively. He has given lectures extensively. He has practiced in the field extensively. He's worked for the IRS. He's worked for the FBI. He's worked for the Customs. He's worked for the City of Houston Police Department. He's worked for Harris County District Attorney's Office. All of those persons, Judge, all of those persons have used him as an expert. And I think to allow him to testify in this particular case as an expert will assist the jury in making a conclusion as to whose voice is actually on that tape. And we're asking the Court to allow him to do that.

THE COURT: Okay. Thank you all. I'll be back here at about 5 of 1:00.

(12:35, recess.)

THE COURT: Please be seated.

I have taken this break and reviewed the evidence, reviewed the standards, the testimony that has been provided to me both by Mr. Joe and Dr. Yonovitz as well as Dr. Hirotaka Nakasone from the FBI and Mr. Williams, Larry Williams, from the Houston Police Department. The testimony that I am going to rely on for the purposes of these findings and conclusions is primarily the testimony of Dr. Yonovitz and somewhat Dr. Nakasone. He provided us with background information. Some of the technical information that I got from him is helpful, and I do rely on it. However, I'm not relying very much on Mr. Joe's testimony. It was very general. Mr. Joe's certifications are in serious question and I think by the time that the hearing evolved to today, the defendant intended to rely on Dr. Yonovitz. I will say that I found a significant qualitative difference in the expertise and the ability to explain matters between those two gentlemen.

This is a case that is governed -- the procedure here is governed by Daubert. It's governed specifically by the case of Daubert versus Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 1993, and Kumho Tire versus Carmichael, 119 S.Ct. 1167, 1178, 1999, and, of course, Rule 702 of the Federal Rules of Evidence.

Under Rule 702, a witness qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise. These cases make it clear that the trial judge must determine as an initial matter whether the proffered witness is qualified to give the expert opinion he seeks to express.

Procedurally if I determine that the expert has sufficient knowledge, experience, et cetera, then I must determine whether the testimony that is proffered will, No. 1, qualify as scientific, technical, or other specialized knowledge; and, 2, if the opinions will assist the trier of fact to understand the evidence or resolve a disputed factual issue. Kumho Tire, 119 S.Ct. At 1174 and Daubert at 589. Watkins versus Telsmith 121 F.3d 984, 989, Fifth Circuit 1997.

The first inquiry focuses on whether the proffered evidence is scientifically valid and thus sufficiently reliable. The second inquiry is basically a relevance inquiry. See Daubert at 590-91 and Tanner versus Westbrook. I don't have -- it's a F.3d cite, Fifth Circuit 1999, and Watkins at 989.

The burden is on the party offering the expert testimony. That party must establish that the testimony is admissible. Moore versus Ashland Chemical, 151 F.3d 269, 276, Fifth Circuit 1998 en banc, cert. denied.

Reliability and validity do not require certainty but must be demonstrated by the evidence that the knowledge is more than speculation. Daubert 509 U.S. at 590.

The Court must consider the validity of the scientific principles used, the accuracy of the data relied on by the expert, and the correctness of the application of the scientific principles to the relevant data. See Watkins, 121 F.3d at 989 and Marcel versus Placid Oil, 11 F.3d 563, 567, Fifth Circuit 1994.

In determining reliability of proffered scientific evidence, I need to consider the following: One, whether the theory or procedure has been subjected to testing; two, whether it has been subjected to peer review and publication; three, the rate of error and the existence of standards controlling the theory or procedure; and, four, whether it has attained general acceptance. See Watkins, 121 F.3d at 989.

The Tanner case for the record is at 174 F.3d 542, 548.

I don't think there's any doubt that the standards apply to the testimony sought to be offered by Dr. Yonovitz. The facts are very specific to each case and the inquiry is one that needs to be grounded in an analysis of the detailed facts and details of the opinions sought to be offered. Therefore, I'm going to apply the standards.

I specifically find and legally conclude that Mr. Joe has not established that he has the expertise that is necessary for him to testify in this case. I think that may be moot; but to the extent there was any question, that's my finding.

His ability to explain the methods was not sufficient to satisfy me that there was true expertise involved in his analysis and he was not in a position to demonstrate and has not demonstrated that he in fact is board certified or a diplomate of anything. So, his expertise is, in fact, in question for me.

Dr. Yonovitz is clearly an expert in the field that he purports to work in and testify in. His expertise in the acoustic and linguistic areas is clear and indeed he was and has spoken at numerous scientific fora and I conclude that his education, his study of the subjects of speaker identification as well as other things related to speaker and voice identification does give him sufficient knowledge, expertise, and experience to give opinions in the proper case.

The gatekeeping function, however, is an important one. And in this case the defendant has failed to establish that the evidence that he seeks to offer qualifies as truly scientific. Also, the defendant fails to establish that the opinions of Dr. Yonovitz will assist the jury.

My reasoning on that is multifaceted, but I will try to summarize it. I will say that a review of all of the literature provided in this record, including the standards submitted today by the government of the American Board of Recorded Evidence, which is apparently a subsidiary of the American College of Forensic Examiners, all of those materials establish that the spectral analysis in this case as well as the aural, a-u-r-a-l, analysis is not the -- is not appropriate for testimony before a jury.

I will note that Dr. Yonovitz and Mr. Joe seem highly confident of their opinion that the tape that they received as the exemplar and the voice from the second or third generation Kell recording that they received, those voices are not from the same person. And they certainly have their reasons, and I can understand them.

I will say, as a matter of a footnote, that listening to those two recordings, particularly as enhanced, I can understand their view based primarily on the aural analysis. However, their view is not the type of opinion that is admissible in evidence for the reasons that I will explain in a moment.

In particular, I cannot conclude that the proffered comparison is scientifically valid. The American Board of Recorded Evidence, which is apparently the most recent standards on these things sets up a detailed set of requirements for creating exemplars and then for analyzing the exemplar as compared to the unknown voice. There is also a requirement that the unknown tape be carefully handled and that various steps be taken for evidentiary purposes that were not taken in this case.

The handling of the Kell recording and the repeated copies that were made is a factor which undermines the scientific basis for comparisons to that tape. It is a tape that contains enormous background noise, and the only way that tape could even be of any value to someone analyzing it for the aural analysis was by doing the blocking out of the background noise. Dr. Yonovitz did not demonstrate to my satisfaction the methods that were used to block out that noise to ensure that in fact the tape was not -- that the voice on the tape was not altered in a meaningful or at least relevant way.

The American Board of Recorded Evidence standards at Section 5 as well as -- no, strike that. That's on something else. Section 4, teach that there has to be some safeguards taken even when the original tape is digitized or is analyzed through copies. I won't burden the record with all of the details from this document, this set of standards. They're in Government's Exhibit 7. I will say, however, that there is no information in the record how the enhanced copy was made, and so that's my major point. I cannot therefore say that it was created in a scientifically reliable way.

Also, the testimony is not grounded in scientific principles because the exemplar that was made was created under circumstances that are somewhat outside the scope of the standards of the American Board of Recorded Evidence or the IAI. The evidence shows in Defendant's Exhibit 7 that the defendant was to make certain statements after reading the sheet.

The tape that I heard had him saying these statements once each. The defendant testified that he needed to remember the statements in order to speak them, because I interpreted his comments to mean that he was not to read them. It is correct under these accepted standards from the IAI and the American Board, that one should not read them. However, the American Board makes it clear, as I think the IAI does, that the exemplar should be words that are repeated several times because there is intraspeaker variation. It seems to me that was not done here. The single time that he spoke the words, the speed of his speech could have been impacted by the difficulties he was having remembering what to say. He was in an entirely different setting, namely, the jail visiting room from the circumstances out in the parking lot when the questioned transaction occurred. And there are simply too many unknowns to make the exemplar a viable basis for comparison of the Kell recording.

Further, the exemplar lacks sufficient breadth. There was not enough information on the -- there was simply not enough words that were repeated that could be compared to the unknown recording, the Kell recording. The Kell recording contained at best, according to Dr. Joe's, and frankly it speaks for itself, while listening the tape, at best ten words to make comparisons. Most of those words could not be by either expert or any expert the basis of meaningful aural or spectrographic comparison. The only word that was meaningful was "helicopter," and then there was another four-word or five-word phrase that was the subject of some debate. In total that is not enough under any of the published standards to make a definitive or meaningful -- scientifically meaningful comparison.

I credit the concept that Dr. Yonovitz describes, specifically that a true expert might be able to make a meaningful comparison in using less than ten words, but there is simply too little information here to make a comparison that would have any scientific validity and he is simply taking this too far for the purposes of testimony.

In substance, the exemplar lacks reliability and scientific validity. The Kell recording was duplicated and it is of questionable accuracy. And so comparing two things that could contain inherent errors and bias to one another and saying that they don't come -- they don't reflect the same voice or the same person's voice, to me will not assist the jury in any way from a scientific standpoint.

Second, I'm supposed to determine reliability; and for the reasons that I've described as to the fact that this cannot be scientifically valid, I think it is not going to be reliable for the purpose of assisting the jury. Frankly, I think any person could sit and listen to two tapes, if they were made in a quality way or if they were comparable in terms of their creation, and then make a reasoned judgment about whether it is the same person on the tape -- on Tape 1 as on Tape 2.

The literature provided to us in the government's exhibits, specifically Exhibits 3, 4, 5, and 6 -- mainly 3, 4, and 5 and it's 5A and 5B, establishes that the human brain is quite adept at making voice comparisons, but it's based on many things and the circumstances of the comparisons is all important. All of these analyses and studies have been done in a laboratory setting, and it is there that the high degree of accuracy can be obtained. In the forensic setting that is not the case and there is absolutely no basis in the literature to give me comfort that an expert can do a better job of listening to two tapes, assuming the tapes were reliable themselves, a better job than the jury.

In substance, I don't think that the aural comparison requires an expert. While the expert could put certain words defining characteristics of one speech over another or could give opinions about intonation, pitch, jitters, whatever else, that's not -- that level of detail is unimportant for the purposes of this proceeding. The issue is simply were the two people the same on an exemplar tape as compared to the Kell tape. And in that context expert testimony is simply not necessary and would not assist the jury. In fact, to the extent that it were received, it would confuse the jury and I think be misleading. That is the substance of the literature as well, and I have seen nothing to the contrary from the defense.

I will also note it doesn't matter in one sense if there are five categories or seven categories of certainty or lack thereof between identification of the tapes or elimination of voices. For the purpose of evidence as opposed to investigation or as opposed to just gut-level opinion or even scientific opinion, the number of categories doesn't matter. But what does matter is that an expert would get up on a stand in front of a jury and say this is, quote, "a positive elimination," giving the impression that that expert was virtually certain when that phrasing is not in the literature and is nothing more than a personal view based on very inaccurate, very poor evidentiary foundation. And in that sense, from an evidentiary standpoint, the expert should not and will not be allowed to testify.

And I think Dr. Yonovitz knows, because of his law enforcement experience, that what one can do to give leads to a law enforcement agency to assist in investigations is very different from what is required in a court of law before a jury. Dr. Yonovitz seems to believe that when a defendant offers testimony of an expert nature, it need be based on less reliable foundation than when the government offers it. That is not true. And in that sense I think there is a little bit of a mistake of theory. And so, in conclusion, none of the standards have been met, neither of the elements are met under

Daubert or 702, and this witness, Dr. Yonovitz, cannot testify in this case.

I will say Dr. Yonovitz seems to know a lot about what he does and if he hadn't accepted money to reach the conclusions he reached or if he had done more, a deeper analysis of how the material was created that he chose to analyze, his testimony might have been more persuasive to me. It's not the fact that he got a fee. It's the fact that he purports to hold such a definite opinion way beyond the standards that govern his discipline based on far less information than is ordinarily acceptable. And for this science to become accepted in the court of law, standards need to be met; and if you can't meet the standards, the discipline teaches you you do not give an opinion for the purpose of testimony. Testimony like Dr. Joe -- or Mr. Joe or Dr. Yonovitz want to give here will ruin, ruin the science and the movement that I think he believes in and that frankly I think has some merit in proper settings. So, I caution experts against reaching too far to give opinions based on a bases of evidence or tapes that are too unreliable. It's a disservice to everyone concerned.

Those are my findings and conclusions.

I will note that the cases of -- Fifth Circuit cases of Black versus Food Lion, 171 F.3d 308; Tanner I cited already and there are other cases that support this result.

So, with that said, this hearing is closed. The experts may not testify.

(End of Daubert hearing.)

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I certify that the foregoing is a correct transcript from the record of proceedings in the above-entitled cause.

Kathy L. Metzger
Kathy L. Metzger
Official Court Reporter

8-9-00
Date